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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,045	07/30/2003	Edward Lynn Triplett	2002-0830.02/4670-162	7064

7590 04/25/2007  
LEXMARK INTERNATIONAL, INC.  
ATT: JOHN J. McARDLE, JR.  
740 WEST NEW CIRCLE ROAD  
LEXINGTON, KY 40550

EXAMINER
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NGUYEN, ANTHONY H

ART UNIT	PAPER NUMBER
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2854

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/630,045

**Applicant(s)**

TRIPLETT ET AL.

**Examiner**

Anthony H. Nguyen

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-14 and 16-33 is/are pending in the application.
- 4a) Of the above claim(s) 19-23 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12, 13 and 24-33 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 U.S.C. § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano et al. (US 5,346,197).

With respect to claims 24, 26 and 27, Takano et al. teaches an image forming apparatus 100 having a cassette or a removable media tray 20 having a first media sheet stack area 24 and second media sheet stack 30 which are disposed in a generally horizontally aligned position in the tray. The second media sheet stack area having guides or an input port 34 on an exterior of the image forming apparatus as shown in Fig.1 and 2. With respect to claim 25, the first and second media sheet stack areas share one alignment surface 21F (Takano et al., Fig.4). With respect to claims 28 and 29, Takano et al. teaches the conventional use of the first and second pick mechanism 12 and 27 to pick media sheets from the first and second stacks as shown in Figs. 2 and 5, and the use of a drive source or a motor for coupling to the drive mechanism (Takano et al., col.3, lines 11-18).

Claims 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Otake et al. (US 5,327,207).

Otake et al. teaches an image forming apparatus 100 having a cassette or a removable media tray 70, a media exit port 18 and the first and second pick mechanisms 14. The tray 70

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includes a first media sheet stack area which are horizontally aligned position with a second media sheet stack area via the controlling plates 33 and 34 (Otake et al., Fig.1 and col.5, second paragraph). Note that one of the stack area is a multi-purpose tray since it can be contained two kinds of sheets of Legal or Letter, and the sheets are fed through the exit port and the second media sheet having an input port 130 an exterior of the image forming apparatus for manual feeding media sheets as shown in Fig.1 of Otake et al.

Claims 30-32 is rejected under 35 U.S.C. 102(b) as being anticipated by Otake et al. (US 5,327,207).

Otake et al. teaches a method of operating an image forming apparatus 100 having the step of inserting a cassette or a removable media tray 70 into the image forming apparatus, picking a media sheet from the first and second media sources (Otake et al., col.6, lines 3-14) and the steps of removing and replacing the tray are inherently operating steps of the image forming apparatus. With respect to claims 31 and 32, the steps are the same regardless the numbers of trays or units to be inserted.

### **Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2, 7-10, 12 and 13 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kanda et al. (US 6,148,172) in view of Barton (US 5,932,313) and Otake et al. (US 5,327,207).

With respect to claims 1,2,8 and 9, Kanda et al. teaches an image forming apparatus 3 having a removable media tray which includes a housing 4A which contains a primary media stack of media sheets, a pick mechanism to pick and move the media sheet via a pick-up roller 51 via a driving means (not shown, Kanda et al., col.13, lines 24 and 25) ) to an exit port (shown at 571A and 572A). Kanda et al. does not clearly teach the pick mechanism drive assembly within the housing to actuate the pick mechanism and the multi-purpose tray input which receives media sheets. Barton teaches a removable tray 10 having a pick mechanism 18-22 which includes a motor 20 and a drive train 21 as shown in Fig.1 of Barton, and Otake et al. teaches an image forming apparatus 100 having a cassette or a removable media tray 70, a media exit port 18 and the first and second pick mechanisms 14. The tray 70 includes a first media sheet stack area and a multi-purpose tray input which can receives two kinds of sheets of Legal or Letter that are fed through the exit port. In view of the teachings of Barton and Otake et al., it would have been obvious to one of ordinary skill in the art to modify the removable tray of Kanda et al. by providing the pick mechanism as taught by Barton and the multi-purpose tray input as taught by Otake et al. for more compact in design of an image forming apparatus. With respect to claim 10, the use of one-way clutch to restrict the motion of the pick mechanisms to forward direction is conventional. For example, see Kanda et al., col.18 lines 47-55. With respect to claim 12, the use of a large-capacity media sheet supply containing media sheet having a sheet feeding path to an exit port via a removable tray is well known in the art. With respect to claim 13, Fig. 5 of Kanda et al. shows a sensor (S1A) which detects a leading edge or the present of a media sheet.

Claims 3-5 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kanda et al. in view of Barton and Otake et al. as applied to claims 1,2, 7-10, 12 and 13 above, and further in view of Dutton et al. (US 5,758,249).

Kanda et al., Barton and Otake et al. teach all that is claimed, except the connector disposed to form electrical contact with a corresponding connector when the removable tray is inserted in the image forming apparatus. Dutton et al. teaches the conventional connector and corresponding connector 33 (shown in Figs.1 and 3) which are coupled to the removable trays 1,3, 5, 43 and 45 when the trays are connected together. In view of the teaching of Dutton, it would have been obvious to one of ordinary skill in the art to modify the removable tray of Kanda et al., Barton and Otake et al. by providing the conventional connector and corresponding connector as taught by Dutton for the advantage of providing separated desired tray with a selected medium for printing in an image forming apparatus during printing operation.

Claims 29 and 33 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Otake et al. (US 5,327,207) in view of Barton (US 5,932,313).

Otake et al. teaches an image forming apparatus 100 having a cassette or a removable media tray 70, a media exit port 18 and the first and second pick mechanisms 14. The tray 70 includes a first media sheet stack area which are horizontally aligned position with a second media sheet stack area via the controlling plates 33 and 34 (Otake et al., Fig.1 and col.5, second paragraph). Otake et al. does not clearly teach the motor which is connected to an integrated drive train to pick media sheet from the first and second second sources. Barton teaches a removable tray 10 having a pick mechanism 18-22 which includes a motor 20 and a drive train 21 as shown in Fig.1 of Barton. In view of the teaching of Barton, it would have been obvious to one of ordinary skill in the art to modify the removable tray of Otake et al. by providing the motor which is coupled to the pick mechanism as taught by Barton for more compact in design

an image forming apparatus. Note that the pick-up feed roller 14 of Otake et al. is in reversed or opposite direction for feeding sheets of Letter (Otake et al., col.5, lines 57-67).

***Allowable Subject Matter***

As presently advised it appears that claim 11 avoids the prior art but are objected to as depending from the rejected claim. The claim if properly rewritten in independent form and would be allowable.

Claims 14 and 16-18 are allowable.

***Response to Arguments***

Applicants' arguments filed on March 02, 2007 have been fully considered but they are not persuasive of any error in view of the new ground(s) of rejections.

Applicant argues that Otake et al. does not teach a common motor which operates both rollers with in the same tray or operates in first and second directions.

However, applicants' arguments are more specific than the limitations in the claim. For example, the limitations "a common motor" or "rollers within the same tray" are not recited in the claim. Clearly, as explained above, Otake et al. teaches the steps of picking a media sheet from the first media and second media sources by actuating by a motor in first and second direction as shown in Fig.1 of Otake et al. and col.5 lines 57-68.

***Conclusion***

The patents to Beretta et al., Komaba et al. and Watanabe are cited to show other structures and methods having obvious similarities to the claimed structure and method.

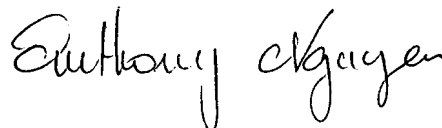
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen, can be reached on (571) 272-2258. The fax phone number for this Group is (571) 273-8300.



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04/19/2007  
Patent Examiner  
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